



3-15-05

IFW

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

6

Application Number

10/790,455

Filing Date

March 1, 2004

First Named Inventor

Alex J. Harvey

Art Unit

1642

Examiner Name

Not yet assigned

Attorney Docket Number

AVI-025

ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	1. Form 1449 and copies of 30 References
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	2. Return Postcard
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Reply to Missing Parts/Incomplete Application	<input type="checkbox"/> Landscape Table on CD	
<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53		

Remarks

Total number of pages (6) does not include the pages of the enclosed 30 references

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	AviGenics, Inc.		
Signature			
Printed name	Kyle Yesland		
Date	March 14, 2005	Reg. No.	45526

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature			
Typed or printed name	Kyle Yesland	Date	March 14, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

65



1-025

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/790,455
Applicant : Alex J. Harvey
Filed : March 1, 2004
Title : Integrase Mediated Avian Transgenesis

TC/A.U. : 1642
Examiner : Not yet assigned

Docket No. : AVI-025

Express Mail Mailing Label No. ED 446611217 US

Date of Deposit: March 14, 2005

I hereby certify that the following documents as identified below are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and are addressed to the Commissioner for Patents, Mail Stop: Amendment, P.O. Box 1450, Alexandria, VA 22313-1450.

1. Transmittal Form;
2. Supplemental Information Disclosure Statement
3. Form PTO-1449 and 30 cited references; and
4. Return post card.

The 4 above-identified documents and references are enclosed herewith.

Respectfully submitted,

Kyle Yesland, 706-227-1170, ext. 233
Attorney for Applicants
Reg. No. 45,526
AviGenics, Inc.
Legal Department
111 Riverbend Rd.
Athens, Georgia 30605



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/790,455
Applicant : Alex J. Harvey
Filed : March 1, 2004
Title : Integrase Mediated Avian Transgenesis

TC/A.U. : 1642
Examiner : Not yet assigned

Docket No. : AVI-025

I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 with Express Mail Number: ED 446611217 US, addressed to:
Mail Stop Amendment, Commissioner for Patents, P.O Box 1450, Alexandria VA 22313-1450:

Date March 14, 2005
Signature [Signature]
Name Kyle Yesland

Honorable Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Mail Stop: Amendment

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Applicants hereby voluntarily disclose the items listed on the attached Form PTO-1449 to the Commissioner for Patents. A copy of the documents are provided herewith, excluding issued US Patents.

Applicants further reserve the right to establish the patentability of the claimed invention over any of the listed information should they be applied as references, and/or to prove that some of the cited information may not be prior art, and/or to prove that some of the cited information may not be enabling for the teachings they purport to offer. This statement further should not be construed as a representation that an exhaustive search has been made, or that the information cited herewith is material, or that there does not exist information more material to the examination of

the present Application. The Examiner is requested to conduct an independent and thorough review of the information, and to form independent opinions as to their significance. The Examiner is specifically requested not to rely solely on the information submitted herein.

It is respectfully requested that the Examiner initial and return copies of the enclosed PTO-1449 and to indicate in the official file wrapper of the above-identified patent application that each item of the cited information has been considered.

Applicants believe that no fee is required. If any fee is required, the undersigned hereby authorizes charging Deposit Account No. 501729 for any such fee not submitted herewith.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Kyle Yesland', written in a cursive style.

Kyle Yesland, 706-227-1170, ext. 233
Attorney for Applicants
Reg. No. 45,526
AviGenics, Inc.
Legal Department
111 Riverbend Rd.
Athens, Georgia 30605

Form PTO-1449



INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Attorney Docket No.
AVI-025Serial No.
10/790,455

Applicant

HARVEY et al

Filing Date

March 1, 2004

Group

1642

U.S. PATENT DOCUMENTS

Examiner Initials	Item	Document Number	Issue Date	Name	Class	Subclass	Publication Date
	1.	6,025,155	02-15-00	Hadlaczky, et al.			
	2.	6,743,967	06-01-04	Hadlaczky, et al.			
	3.	6,077,697	06-20-00	Hadlaczky, et al.			
	4.	2003/0113917		De Jong, et al.			06-19-03
	5.	2003/0003435		De Jong, et al.			01-02-03

FOREIGN PATENT DOCUMENTS

Examiner Initials	Item	Document Number	Publication Date	Country	Class	Subclass	Translation	
							Yes	No
	6.	WO 2002/097059	12-05-02				X	
	7.	WO 02/076508	10-03-02				X	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

	8.	COLLAS, et al, Nuclear Localization Signal of SV40 T Antigen Directs Import of Plasmid DNA into Sea Urchin Male Pronuclei In Vitro, <i>Mol. Reprod. and Dvlp.</i> 45:431-438 (1996)					
	9.	COLLAS, et al, Nuclear Localization Signals: a driving force for nuclear transport of plasmid DNA in zebrafish, <i>Biochem. Cell Biol.</i> 75:633-640 (1997)					
	10.	COLLAS, et al, The nuclear localization sequence of the SV40 T antigen promotes transgene uptake and expression in zebrafish embryo nuclei, <i>Transgenic Research</i> 5, 451-458 (1996)					
	11.	BOULIKAS, Nuclear Localization Signals (NLS), <i>Critical Review in Eukaryotic Gene Expression</i> , 3(3):193-227 (1993)					
	12.	LORBACH, et al, Site-specific Recombination in Human Cells Catalyzed by Phage λ Integrase Mutants, <i>J. Mol. Biol.</i> , 296, 1175-1181 (2000)					
	13.	THORPE, et al, Control of directionality in the site-specific recombination system of the <i>Streptomyces</i> phage ϕ C31, <i>Molecular Microbiology</i> , 38(2), 232-241 (2000)					
	14.	SCLIMENTI, et al, Directed evolution of a recombinase for improved genomic integration at a native human sequence, <i>Nucleic Acids Research</i> , 29(24), 5044-5051 (2001)					
	15.	COATES, et al, Purified <i>mariner</i> (<i>Mos1</i>) transposase catalyzes the integration of marked elements into the germ-line of the yellow fever mosquito, <i>Aedes aegypti</i> , <i>Insect Biochem and Mol. Biology</i> , 30, 1003-1008 (2000)					

Examiner
SignatureDate
Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered.

Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Form PTO-1449		Attorney Docket No. AVI-025	Serial No. 10/790,455
INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>		Applicant HARVEY et al	
		Filing Date March 1, 2004	Group 1642
OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, etc.)</i>			
16.	ESPOSITO, et al, The integrase family of tyrosine recombinases: evolution of a conserved active site domain, <i>Nucleic Acids Research</i> , 25:3605-3614 (1997)		
17.	NUNES-DÜBY, Similarities and differences among 105 members of the Int family of site-specific recombinases; <i>Nucleic Acids Research</i> , 26; 391-406 (1998)		
18.	COKOL, et al, Finding nuclear localization signals, <i>EMBO Reports</i> , 1(5):411-415 (2000)		
19.	KUKOWSKA-LATTALLO, et al, Efficient transfer of genetic material into mammalian cells using starburst polyamidoamine dendrimers, <i>Proc. Natl. Acad. Sci. USA</i> 93:4897-4902 (1996)		
20.	HARVEY, et al, Expression of exogenous protein in the egg white of transgenic chickens, <i>Nature Biotech.</i> , 20:396-399 (2002)		
21.	CSONKA, et al, Novel generation of human satellite DNA-based artificial chromosomes in mammalian cells, <i>Journal of Cell Science</i> , 113:3207-3216 (2000)		
22.	HADLACZKY, et al, Centromere formation in mouse cells cotransformed with human DNA and a dominant marker gene, <i>Proc. Natl. Acad. Sci. USA</i> , 88:8106-8110 (1991)		
23.	HADLACZKY, et al, Satellite DNA-based artificial chromosomes for use in gene therapy, <i>Curr. Opin. Mol. Ther.</i> , Apr. 3(2):125-32 (2001)		
24.	LIPPS, et al, Chromosome-based vectors for gene therapy, <i>Gene</i> , 304:23-33 (2003)		
25.	PRAZNOVSZKY, et al, <i>De novo</i> chromosome formation in rodent cells, <i>Proc. Natl. Acad. Sci. USA</i> , 88:11042-11046 (1991)		
26.	STEWART, et al, Retrofitting of a satellite repeat DNA-based murine artificial chromosome (ACes) to contain loxP recombination sites, <i>Gene Therapy</i> , 9:719-723, (2002)		
27.	TELENIUS, et al, Stability of a functional murine satellite DNA-based artificial chromosome across mammalian species, <i>Chromosome Research</i> , 7:3-7, (1999)		
28.	VANDERBYL, et al, A Flow Cytometry Technique for Measuring Chromosome-Mediated Gene Transfer, <i>Cytometry</i> , 44:100-105 (2001)		
29.	VANDERBYL, et al, Transfer and Stable Transgene Expression of a Mammalian Artificial Chromosome into Bone Marrow-Derived Human Mesenchymal Stem Cells, <i>Stem Cells</i> , 22:324-333 (2004)		
30.	WANG, et al, Expression of a Reporter Gene After Microinjection of Mammalian Artificial Chromosomes Into Pronuclei of Bovine Zygotes, <i>Mol. Reprod. And Dev.</i> , 60:433-438 (2001)		
31.	KERESŐ, et al, <i>De novo</i> chromosome formations by large-scale amplification of the centromeric region of mouse chromosomes, <i>Chromosome Res.</i> , Apr; 4(3):226-239 (1996)		
32.	MONTEITH, et al, Pronuclear Microinjection of Purified Artificial Chromosomes for Generation of Transgenic Mice, <i>Methods in Mol. Biol.</i> 240:227-242 (2004)		
33.	MILLS, et al, Generation of an ~2.4 Mb human X centromere-based minichromosome by targeted telomere-associated chromosome fragmentation in DT40, <i>Human Molecular Genetics</i> , 8(5) 751-761 (1999)		